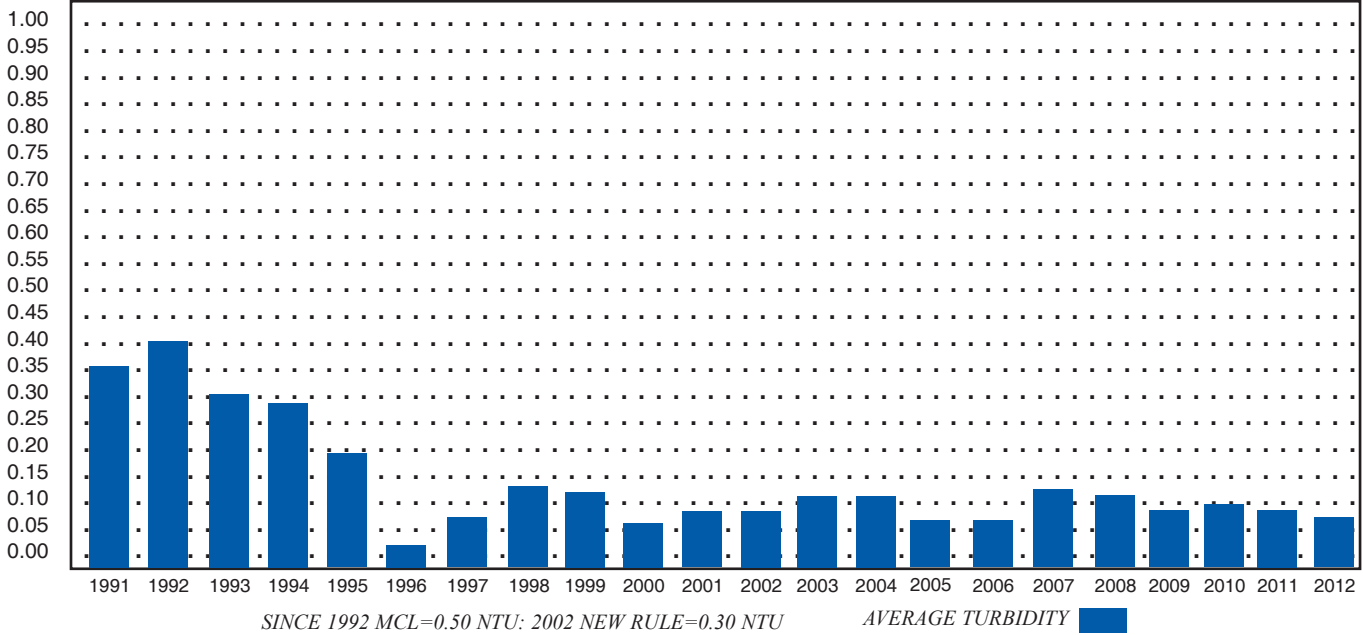


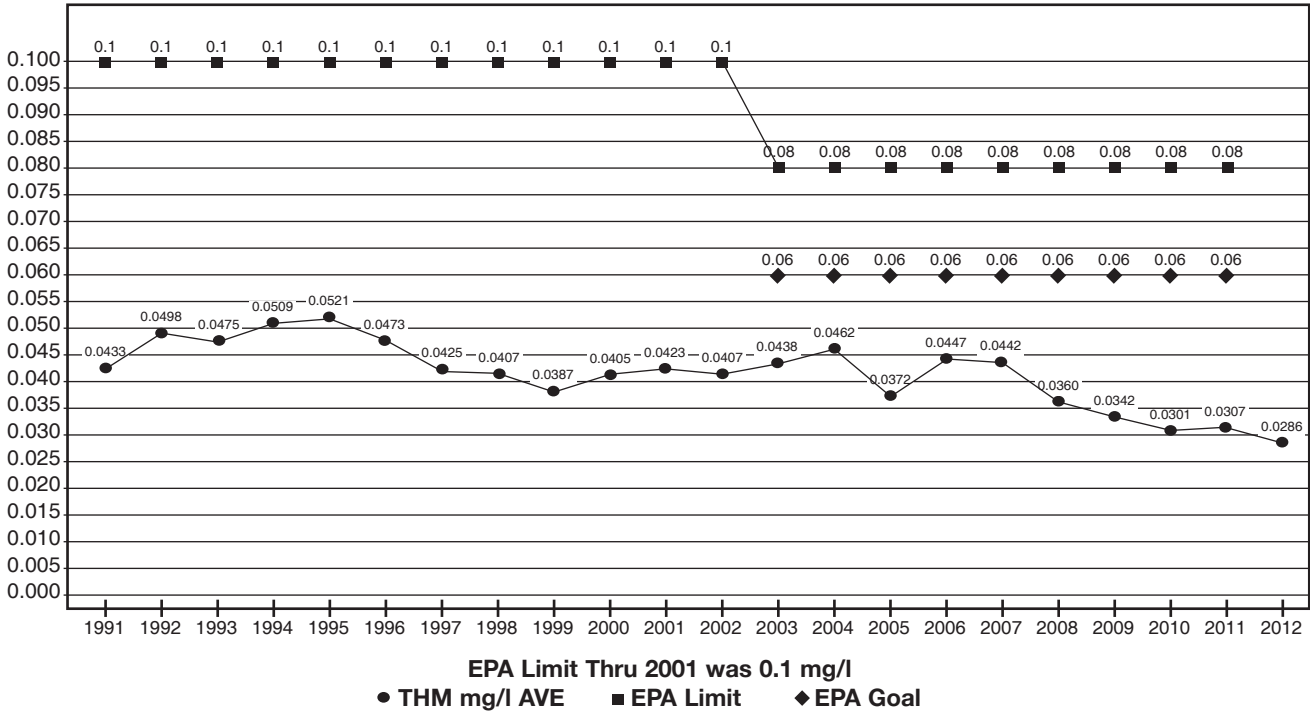
Annual Drinking Water Quality Report

In summary, the Commission continues to be well within EPA guidelines. Over the last 20 years, the EPA has reduced the acceptable levels of many parameters to levels that once were thought to be unattainable. For example from the mid 1970’s through at least 1990, turbidity was allowed to average 1.0 NTU on a daily basis, with a limit of 5.0 NTU. In the early 1990’s, allowable turbidity was cut in half, from 1.0 NTU to 0.5 NTU. The 1996 surface water rules have now reduced allowable turbidity to 0.3 NTU. The water treatment plant has averaged below a 0.15 NTU since 1996.

Annual Average Turbidity (NTU)
1991-2012



ANN.THM'S 1991-2012
EPA LIMIT: 0.08 mg/l (STARTING 1990)



Many other chemicals listed are measured in parts per billion, and most of these are not detectable, or at extremely low levels. Twenty-five years ago, measurements at this low level of magnitude were not possible.

The Commission wants its customers to know that it too sets more stringent goals each year, and that our personnel throughout the Commission work hard for you.

We operate 365 days per year, averaging 20 hours per day, under all types of extreme weather conditions. We, like any other facility, will have problems from time to time, but assure you that we will work hard to resolve those problems as quickly as possible.

Tom Doyle
Thomas G. Doyle
Manager

Annual Drinking Water Quality Report
For 2012

Shelbyville Municipal Water & Sewer Commission

1059 Washington Street
Shelbyville, Kentucky 40065
502-633-2840

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you of the quality of water and services we treat and deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is *Guist Creek Lake which is a surface water source of supply*. Guist Creek Lake is an excellent source of supply, and we recently completed a source water assessment and protection plan. Guist Creek Lake has a 29 square mile watershed which consists of predominately agricultural acreage, with some residential units around the lake. It is important that the community helps protect this valuable water source located about 2.5 miles east of Shelbyville, and north of U.S. 60.

SOURCE WATER ASSESSMENT AND PROTECTION PLAN

Activities and uses upstream of Guist Creek Lake, which is the Commission's source of water, and a surface water supply, can pose potential risks to your drinking water.

Under certain circumstances, contaminants could be released that would pose challenges to water treatment, or even get into your drinking water. These activities and how they are conducted, are of interest to the entire community because they potentially effect your health and the cost of treating your water. Activities immediately upstream of your water supply intake are of special concern because they provide little response time to the water system operators.

Following is the summary & recommendations of the Source Water Assessment and Protection Plan completed by the KIPDA Regional Planning Agency with cooperation from the Commission and the Kentucky Division of Water: This summary is available for your review at the Commission office.

SUMMARY

Potential contaminant sources within the Guist Creek Lake watershed include four (4) underground petroleum sites and one above ground petroleum storage tank. In addition, there were two bridges, one inactive landfill which is closed to the public and no longer accepts waste, and one site (Bell South) which uses hazardous materials. Each are rated as high in the susceptibility analysis table because of the contaminant type, their proximity to Guist Creek Lake, and the high chance of release. Other potential contaminant sites are concerned with major roads and commercial activities and all are ranked medium in the susceptibility analysis table.

RECOMMENDATIONS

- Prevent urbanization of the watershed through Planning & Zoning, and the Fiscal Court by limiting subdivisions to 5 acre tracts.
- Enact ordinance to protect the watershed from accidents caused by commercial carriers using roads within the watershed (specifically U.S. 60 in order to by-pass weigh stations located on I-64).
- Strategically place signs on roads within the watershed and especially along U.S. 60 to discourage commercial vehicles from using roads to by-pass I-64.
- Continue to eliminate vehicle and pedestrian traffic from the dam area.
- Do not allow package treatment plants within the watershed.
- Deter/restrict the use of lawn chemicals in residential areas within 1,000 feet of normal pool.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the *EPA Safe Drinking Water Hotline* at 1-800-426-4791.

Immuno-Compromised Persons

Some people may be more vulnerable to contaminants in drinking water than the general population. **Immuno-compromised persons such as persons with cancer or undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections.** These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the *Safe Drinking Water Hotline (800-426-4791)*

Annual Drinking Water Quality Report

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the land or underground it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic Contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming.
Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
Pesticides and Herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The State and EPA require us to test our water on a regular basis to ensure its safety.

We are very pleased to report that our drinking water is safe and meets Federal and State requirements. The purpose of this report is to show you our water quality results for 2012, and what that means to you.

If you have any questions about this report or concerning your water quality, please contact **Thomas G. Doyle** at 502-633-2840 between the hours of 8 am and 5 pm Monday through Friday. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Monday of each month at 6:30 pm in the basement of the Commission located at 1059 Washington Street. Feel free to participate in these meetings.

The **Shelbyville Municipal Water and Sewer Commission** routinely monitors for constituents in your drinking water according to Federal and State laws. The “Water Quality Data” table on pages 3, 4, 5, & 6 list all detected constituents for the period of January 1st, 2012 to December 31st, 2012.

We are not required to publish test results for constituents that are not detected. However, on page 7, we have listed those constituents that were tested for, but not detected.

WE ARE VERY
PLEASED TO REPORT
THAT THE DRINKING
WATER PROVIDED BY
*Shelbyville Municipal
Water and Sewer
Commission*
IS SAFE AND MEETS
FEDERAL AND STATE
REQUIREMENTS.

In the following tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we’ve provided the following definitions:

Maximum Contaminant Level (MCL) - The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG) - The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Residual Disinfectant Level (MRDL) - The highest level of contaminant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MDRLG’S do no reflect the benefits of the use of disinfectants to control microbial contaminants.
Below Detection Levels (BDL) - Laboratory analysis indicates that the contaminant is not present.
Not Applicable (N/A) - Does not apply.
Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
Parts per Million (ppm) or **Milligrams per Liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
Parts per Billion (ppb) or **Micrograms per Liter (mcg/l)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
Parts per Trillion (ppt) or **Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
Picocuries per Liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Millirems per Year (mrem/yr) - measure of radiation absorbed by the body.
Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Annual Drinking Water Quality Report

Summary of Health Concerns (continued)

Nitrite - Infants, below the age of six months who drink water containing nitrite in excess of the MCL, could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and “blue-baby syndrome”. **The Commission has historically had nitrite & nitrate levels well below the MCL.**

TTHM’s (Trihalomethanes) - Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system, and may have an increased risk of getting cancer. **The Commission has always provided water well below the MCL for TTHM’s, even the recently lowered MCL of 80 ppb.**

As you can see by the tables found earlier, our system had no violations. We’re proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. **The EPA has determined that your water IS SAFE at these levels.**

MCL’s are set a very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water everyday at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Total Coliform - The Total Coliform Rule requires water systems to meet a stricter limit for Coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When Coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we monitor chlorine levels throughout the distribution system.

Arsenic - Arsenic was not detected (Below 2 ppb) in your water during 2011. EPA’s standard balances the correct understanding of Arsenic’s possible health effects against the cost of removing Arsenic from drinking water. EPA continues to research the health effects of low levels of Arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

In January 2006, the EPA reduced arsenic levels from 50 ppb to 10 ppb. The Commission has always tested for arsenic and levels from 1996 through 2000 were **not detectable at 5 ppb (<5 ppb)**, and for 2006 thru 2012 were found to be **not detectable at <2 ppb**.

In our continuing efforts to maintain a safe and dependable water supply the Commission, in 2004-2005, spent \$1.7 million for improvements at the Water Treatment Plant. The Plant was last expanded in 2000. The cost of that upgrade/expansion was over \$4 million. The main purpose of upgrades/expansions is to ensure that the Commission is able to continue to supply a high quality of water to its customers, as well as to increase its ability to provide service to our community. Enhanced disinfection was provided by adding ULTRA-VIOLET (UV) Technology as an additional disinfectant to our process.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. **Please call our office at 633-2840 during working hours if you have questions.**

We at the Shelbyville Municipal Water and Sewer Commission work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources - which are the heart of our community, our way of life, and our children’s future.

The following parameters including PESTICIDES AND HERBICIDES are tested for at the Water Treatment Plant, at certain frequencies as required by the EPA. There was **NO DETECTION** of these contaminants. However, we are listing them so that you are aware of the testing that the Commission performs to ensure the safety of your water.

SYNTHETIC ORGANIC contaminants: 2,4,D: 2,4,5-TP: ALACHLOR: BENZO (A) PYRENE (PHA): CARBUFORAN: CHLORDANE; DALAPON; DINOSEB: DIQUAT: ENDOTHALL: ENDRIN: ETHYLENE DIBROMIDE: GLYPHOSATE: HEP-TACHLOR: HEPTACHLOR EPOXIDE: HEXACHLOROBENZENE: HEXACHLOROCYCLOPENTADIENE: LINDANE: METHOXYCHLOR: OXYMYL: POLYCHLORINATED BIPHENYLES (PCB’s): PENTACHLOROPHENOL: PICLORAM: TOXAPHENE: ALDICARB: ALDICARB SULFONE: ALDICARB SULFOXIDE: 2,4,5 SILVEX: 1,2 DIBROMO-3-CHLORO-PROPANE

VOLATILE ORGANIC contaminants: BENZENE: CARBON TETRACHLORIDE: CHLOROBENZENE: O-DICHLOROBENZENE (1,2): p-DICHLOROBENZENE (1,4): 1,2-DICHLOROETHANE: 1,1-DICHLOROETHYLENE: cis-1,2-DICHLOROETHYLENE: trans-1,2-DICHLOROETHYLENE: DICHLOROMETHANE: 1,2-DICHLOROPROPANE: ETHYLBENZENE: STYRENE: TETRACHLORETHYLENE: TOLUENE: 1,2,4-TRICHLOROBENZENE: 1,1,1-TRICHLOROETHANE: 1,1,2-TRICHLOROETHANE: TRICHLOROETHYLENE: VINYL CHLORIDE: XYLENE:

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IDSE STUDY DISINFECTION BYPRODUCTS *(Units)*

		<i>Range of: Individual Sites</i>	<i>Sampling Dates</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
<i>HAA5</i> (ppb) <i>IDSE</i> (Haloacetic Acids)	IDSE (Individual Distribution System Evaluation) is a study to determine future individual sites	14 To 63	3/13: 5/7: 7/10: 9/10 11/15/2008 & 1/22/2009	N/A	Byproduct of drinking water disinfection
NOTE: Of the 8 sites selected (with EPA approval), the lowest 6 month average HAA5 result for any one site was 26 ppb and the highest 6 month HAA5 average for any one site was 38 ppb. Note: sampling for study was completed Jan. 22, 2009					
<i>TTHM</i> (ppb) <i>IDSE</i> (Total Trihalomethanes)	IDSE (Individual Distribution System Evaluation) is a study to determine future individual sites	20 To 75	3/13: 5/7: 7/10: 9/10 11/15/2008 & 1/22/2009	N/A	Byproduct of drinking water disinfection
NOTE: Of the 8 sites selected (with EPA approval), the lowest 6 month average TTHM result for any one site was 26 ppb and the highest 6 month TTHM average for any one site was 52 ppb.					

SECONDARY CONTAMINANTS

<i>Contaminant (units)</i>	<i>ALLOWABLE LEVELS</i> <i>MCL</i> <i>MCLG</i>		<i>Report Level (MAX. LEVEL DETECTED)</i>	<i>Range of Detection</i>	<i>Date of Sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
<i>Sodium</i> (ppm) EPA recommended high level is 20 ppm	None		4.8	4.75 to 4.80	3/7: & 6/6/2012	N	Naturally occurring
NOTE THAT THERE ARE NO LIMITS FOR SODIUM ONLY RECOMMENDATIONS							

RADIOACTIVE CONTAMINANTS - SAMPLING WAS NOT REQUIRED IN 2011 and 2012

<i>Contaminant (units)</i>	<i>ALLOWABLE LEVELS</i> <i>MCL MCLG</i>		<i>Report Level (MAX. LEVEL DETECTED)</i>	<i>Range of Detection</i>	<i>Date of Sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
<i>Gross Alpha</i> (pCi/L)	15	0	0.02	N/A	1/20/2010	N	Erosion of Natural Deposits
<i>Combined Radium</i> (226 & 228) (pCi/L)	5	0	0.54	N/A	1/20/2010	N	Erosion of Natural Deposits
<i>Uranium</i> (micrograms/liter)	30	0	0.30	N/A	1/20/2010	N	Erosion of Natural Deposits

Summary of Health Concerns

Note: The Commission was in compliance with the following parameters, but the information is provided as instructional information for the Public.

Inorganic Contaminants

Copper - Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor. In any event, it is a wise precaution to flush your tap water for 30 seconds to 2 minutes before using tap water. This will clear your lines. It is especially important after periods of non-water use, such as early in the morning or after a vacation.

The Commission has met all EPA requirements for Copper.

Lead - Infants and young children are typically more vulnerable to Lead in drinking water than the general population. It is possible that Lead levels at your home may be higher than at other homes in the community as a result of material used in your house plumbing. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Shelbyville Municipal Water & Sewer Commission is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your **water has been sitting for several hours**, you can minimize the potential for lead exposure by flushing your tap from 30 seconds to 2 minutes before using **water for drinking or cooking**. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the ***Safe Drinking Water Act Hotline*** (1-800-426-4791), or at <http://epa.gov/safewater/lead>. **The Commission has met all EPA requirements for Lead.**

Nitrate - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause “blue-baby syndrome”. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider. As a precaution we would notify physicians and health care providers in this area if there is over a higher than MCL level in the water supply. Fortunately, we have never had to do this.

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Definitions Continued....

Nephelometric Turbidity Unit (NTU) - A measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for bacterial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

WATER QUALITY DATA FOR DETECTED CONTAMINANTS

The data presented in this report is from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and permitted by the EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless noted, the report level is the highest detected. With this in mind, the sampling period is “generally” from Jan. 1 through Dec. 31, 2012.

There were no water quality violations in 2012.

REGULATED CONTAMINANTS TEST RESULTS

PARTICULATE TEST RESULTS

	<i>Allowable Levels</i>	<i>Highest Single Measurement NTU</i>	<i>Highest Monthly Average NTU</i>	<i>Lowest Monthly Percentage less than 0.3 NTU</i>	<i>Violation Y/N</i>	<i>Likely Source Of Contamination</i>
Turbidity (NTU) TT (TT means Treatment Technique)	No more than 1 NTU* (less than 0.3 NTU in 95% of samples each month)	0.29	0.13	100.00%	N	Soil Runoff

NOTE: Annual average turbidity averaged 0.08 NTU for the entire year and 1,942 bench top tests were conducted during the year. In addition to bench top testing, turbidity is constantly monitored and recorded on the SCADA system.

Turbidity in itself has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

REGULATED CONTAMINANTS TEST RESULTS

MICROBIOLOGICAL CONTAMINANTS

<i>Contaminant (units)</i>	<i>MCL</i>	<i>MCLG</i>	<i>Report Level (MAX. LEVEL DETECTED)</i>	<i>Range of: Detection</i>	<i>Date/s of Positive sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
<i>Total Coliform Bacteria</i> less than 40 samples monthly (# or % positive samples)	5%	0	0	N/A	N/A	N	Naturally present in the environment
Samples are taken at least 25 times per month							
NOTE: The Commission collected 300 routine samples in 2012, for an average of 25 each month.							
Total Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.							

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INORGANIC CONTAMINANTS

<i>Contaminant (units)</i>	<i>ALLOWABLE LEVELS</i>		<i>Report Level (MAX. LEVEL DETECTED)</i>	<i>Range of Detection</i>	<i>Date of Sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
	<i>MCL</i>	<i>MCLG</i>					
Fluoride (ppm)	4	4	1.47	0.08 to 1.47	Everyday	N	Water additive which promotes strong teeth
Fluoride Annual Average was 1.01 ppm							
Nitrate (ppm) as Nitrogen	10	10	2.17	<0.10 to 2.17	1/25; 4/25; 7/25 & 10/16/2012	N	Runoff from fertilizer use; leaching from septic tanks
90TH PERCENTILE							
Copper (ppm)	AL =1.3	1.3	1.16	0.014 - 1.74	6/3; 6/23; 7/12; & 7/13/2010	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
note: The “90th percentile” result must be below the Action Level (AL) of 1.30							
Four sites exceeded the action level of 1.30 ppm out of the 37 sites sampled and ranged from 1.41 to 1.74 ppm							
MEDIAN COPPER LEVEL WAS 0.225 mg/1							

The following example shows the importance of “flushing out” your drinking/cooking water lines before use:

NOTE: During the June, 1998 sampling, 45 homes were sampled for lead on a “First Draw” basis. Of these, 33 homes had copper levels below 50% of the Action Level (AL). Only 3 homes were slightly above the action level (AL) with one home at 1.4 ppm, and two homes at 1.5 ppm. In 1998, repeat samples were taken at these three homes. The repeat sampling consisted of a 1st draw and a 2nd draw some 30-60 seconds later. At one home, the first draw was well below the AL on the 1st draw, and 0.06 ppm on the 2nd draw. At another home, the 1st draw was above the AL, but only 0.29 ppm on the 2nd draw. At the 3rd home, the 1st draw was slightly above the AL on the 1st draw at 1.4 ppm, but well below the AL on the 2nd draw at 0.58 ppm.

<i>Contaminant (units)</i>	<i>ALLOWABLE LEVELS</i>		<i>Report Level (MAX. LEVEL DETECTED)</i>	<i>Range of Detection</i>	<i>Date of Sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
	<i>MCL</i>	<i>MCLG</i>					
90TH PERCENTILE							
Lead (ppb)	AL = 15	0	8	0 to 13	6/3; 6/23; 7/12; & 7/13/2010	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
note: The “90th percentile” result must be below the Action Level (AL) of 15							
No sites exceeded the “action level” out of the 37 sites sampled.							
MEDIAN LEAD LEVEL WAS 3 ppb							

The following example shows the importance of “flushing out” your drinking/cooking water lines before use:

NOTE: In June of 1998, 45 homes were sampled for lead on a “First Draw” basis. Of these, 22 homes had no detectable levels of lead (<5 ppb), and 9 additional homes had lead levels less than 50% of the Action Level (AL). Only two homes were slightly above the Action Level with one home at 16 ppb, and the other at 17 ppb.

In 1998, repeat samples were taken at the two homes. The repeat sampling consisted of a 1st draw, and a 2nd draw some 30-60 seconds later. These test results showed lead below the Action Level on the 1st draw. The test results for the 2nd draw showed lead not detectable in the water. The lead and copper test results demonstrate the importance of “flushing out” your drinking water and cooking water before use.

The Lead and Copper tests demonstrate the importance of “flushing out” your drinking/cooking water lines before use.

SYNTHETIC ORGANIC CHEMICALS INCLUDING PESTICIDES AND HERBICIDES

(Note: Below are the only two (2) parameters detected out of thirty two (32) other synthetic organic chemicals sampled.

Contaminant (units)	ALLOWABLE LEVELS		Report Level	Range	Date of Sample	Violation Y/N	Likely source of contamination
	MCL	MCLG	(MAX. LEVEL DETECTED)				
Atrazine (ppb)	3	3	0.6	0.096 to 0.6	1/25; 4/25; 7/25 10/16/2012	N	Runoff from herbicide used on row crops
Di (2-Ethylhexyl) Phthalate (ppb)	6	6	0.55	ND to 0.55	1/25; 4/25; 7/25 10/16/2012	N	Discharge from rubber and chemical factories
(Note: 3 of 4 samples were undetected)							
VOLATILE ORGANIC CHEMICALS				NONE DETECTED			
Note: On Jan 25, 2012, 20+ Different volatile organic chemical compounds were tested for and not detected							

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DISINFECTANTS/DISINFECTION BYPRODUCTS AND PRECURSORS

<i>Contaminant (units)</i>	<i>MRDL</i>	<i>MRDLG</i>	<i>Highest *</i>	<i>Range 2012 Based on Average Quarter</i>	<i>Date of Sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
Chlorine (ppm) (Free C12)	4	4	1.30*	1.25 to 1.30*	Each month with Coliform Test	N	Water additive used to control microbes
* Based on running qtrs. Based on single tests Lowest result 0.43: Highest result 2.2							
<i>Contaminant (units)</i>	<i>MRDL</i>	<i>MRDLG</i>	<i>Lowest Running Quarter Ave Monthly Ratios</i>	<i>Range Monthly Ratios Lowest : Highest</i>	<i>Date of Sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
Tot. Organic Carbon (ppm) (measured as ppm but reported as a ratio)	TT* >/=1.00	N/A	1.869	1.153 : 3.317 ACTUAL ANNUAL AVERAGE BASED ON 12 MONTHS IS 1.921	Twice Per Month	N	Naturally present in the environment
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. “Running” annual average of the monthly ratios must be 1.00 or greater for compliance.							

<i>Contaminant (units)</i>	<i>MCL</i>	<i>MCLG</i>	<i>MAX ave rolling” quarters</i>	<i>Range Indv. locations</i>	<i>Date of sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
TTHM (ppb) (Total Trihalomethanes)	80 ppb	N/A	29.2	11 TO 65.6	1/18; 4/4; 7/9; 11/4/2012	N	Byproduct of drinking water disinfection
THESE RESULTS EXCLUDES IDSE SITES							
The current limit is 80 ppb.							

NOTE: Compliance is determined by averaging “running” quarters: The annual average for 2012 was 28.6 ppb based on 4 quarters. The EPA limit is 80 ppb. The highest quarterly average was 44.75 ppb. The EPA limit is 80 ppb. Prior to 2000, the EPA limit was 100 ppb. The EPA has required that we now conduct sampling in Water Districts that we serve. These locations wer included begining in 2001.

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water everyday at the MCL level for a lifetime to have a one in a million chance of having the described health effect.

<i>Contaminant (units)</i>	<i>MCL</i>	<i>MCLG</i>	<i>MAX ave running quarters</i>	<i>Range Indv. locations</i>	<i>Date of sample</i>	<i>Violation Y/N</i>	<i>Likely source of contamination</i>
HAA5’S (ppb) ALL SITES (Haloacetic Acids)	60 ppb	N/A	28.2	5 TO 65	1/18; 4/4; 7/9; 11/4/2012	No	Byproduct of drinking water disinfection
THESE RESULTS EXCLUDES IDSE SITES							

NOTE: Compliance is determined by averaging “running” quarters: The annual average for 2012 was 26.7 ppb, based on 4 quarters. The EPA limit is 60 ppb. Prior to 2000, there was no EPA limit. The highest Quarterly average was 44.75 ppb. The EPA has required that we now conduct sampling in Water Districts that we serve. These locations were included beginning in 2001.

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water everyday at the MCL level for a lifetime to have a one in a million chance of having the described health effect.